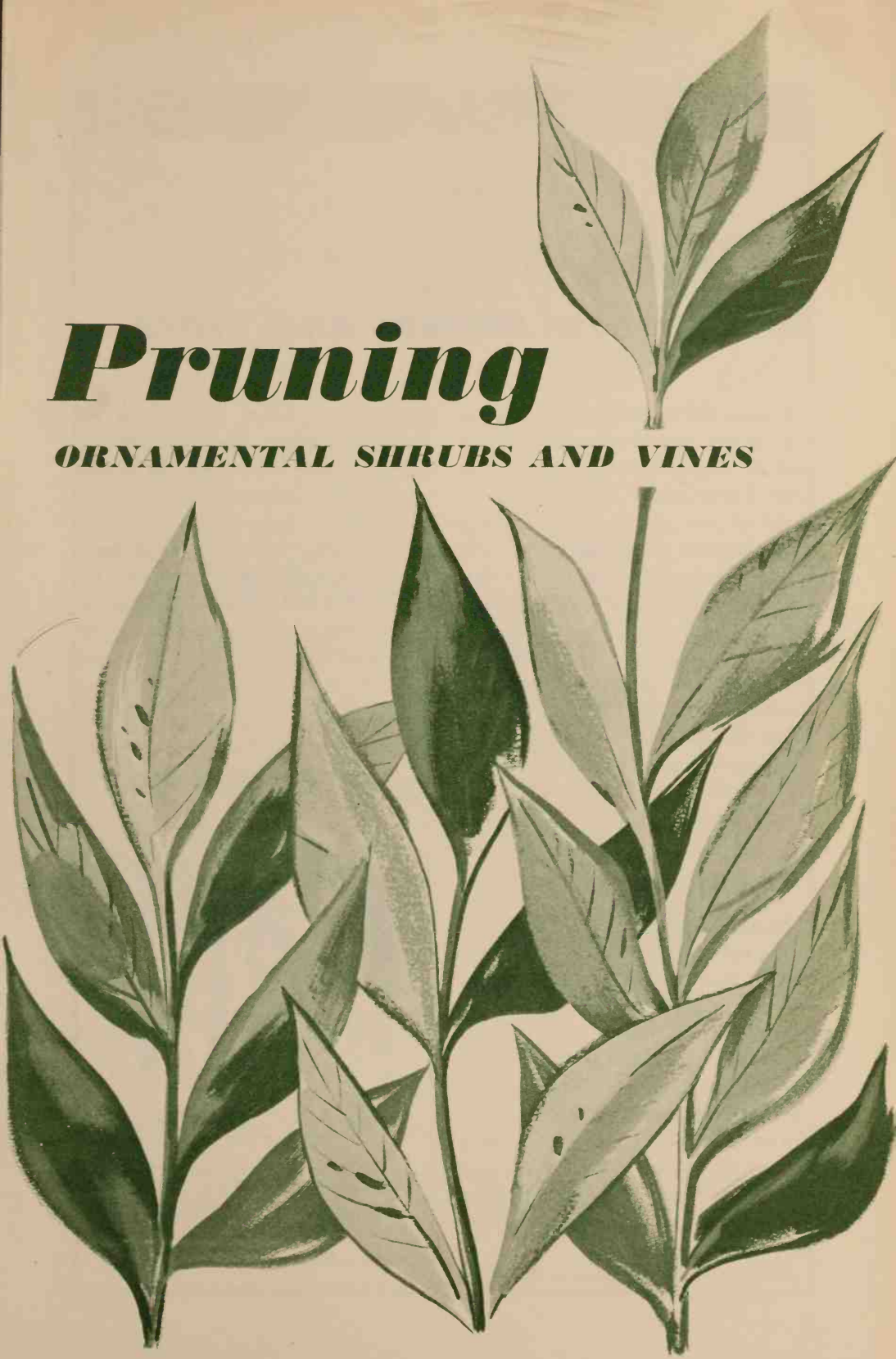
Pruning

ORNAMENTAL SHRUBS AND VINES



U.S. DEPARTMENT OF AGRICULTURE • HOME AND GARDEN BULLETIN NO. 165

PRUNING

Ornamental Shrubs and Vines

Pruning should start when you plant your shrubs and vines and should be part of a regular maintenance program. You should prune to improve the health of your plants, control size and shape, increase the flower display, and remove overcrowded stems or branches.

To improve the health of your plants, cut out dead, diseased, or damaged wood, and remove old wood that interferes with new growth. Prune your shrubs so they keep their natural shape unless you use them as formal hedges. Vines need pruning to limit growth and remove old wood. When you prune, avoid damaging other shoots and branches.

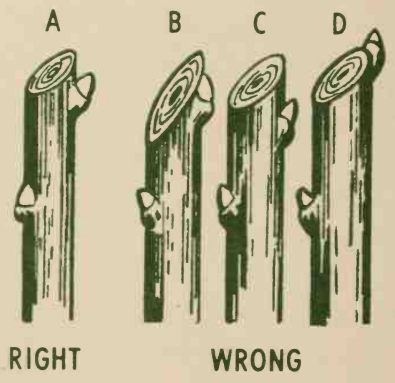
DECIDUOUS SHRUBS

Deciduous shrubs shed their leaves in the fall. You should prune them to control their size, shape, and flowering and to remove dead, diseased, or damaged wood. Individual shrubs that keep their natural size and shape need less pruning than hedges that are trimmed to an artificial size and shape.

You can train an individual shrub to keep its natural shape by thinning branches and stems and by pruning branches back to a bud to control the direction of growth.

The new shoot will grow in the direction the bud points. Before you cut branches or stems, think ahead to how the plant will look when new shoots appear. Then prune the plant the way you want it to grow.

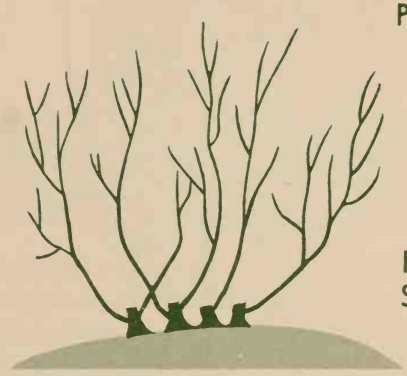
When you prune back to a bud, make the cut on a slant about even with the top of the bud. When removing an entire branch, make the pruning cut flush with the stem. When you cut out



When possible, cut back to a side bud and make the cut at a slant. A is cut correctly. B is too slanting. C is too far from the bud. D is too close to the bud.

PRUNING OVERGROWN PLANTS

RIGHT



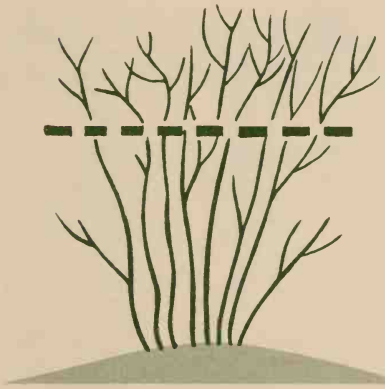
OLD SHRUBS

To prune old shrubs, cut the old stems back to the point where the branches originate, near the ground.

GRAFTED SHRUBS

When pruning shrubs that have been grafted, always remove new twigs that start below the graft knuckle.

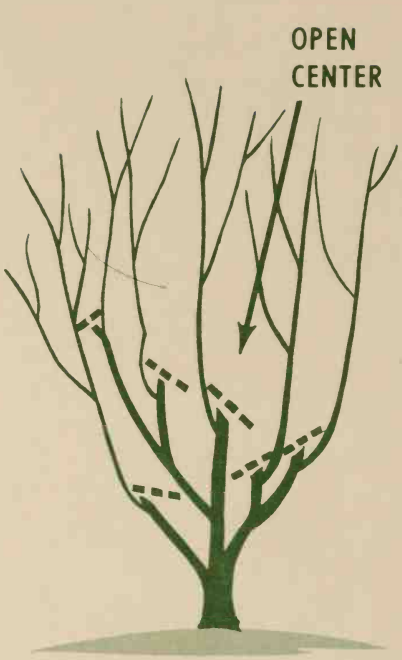
WRONG



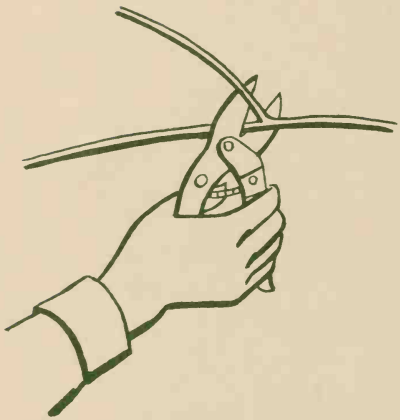
When shrubs are beheaded, as at left, new growth comes only from the top of the plant, resulting in the leggy, bushy-topped shrub shown at the right.

CONTROLLING SHAPE

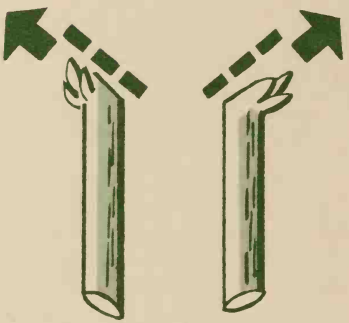
UPRIGHT



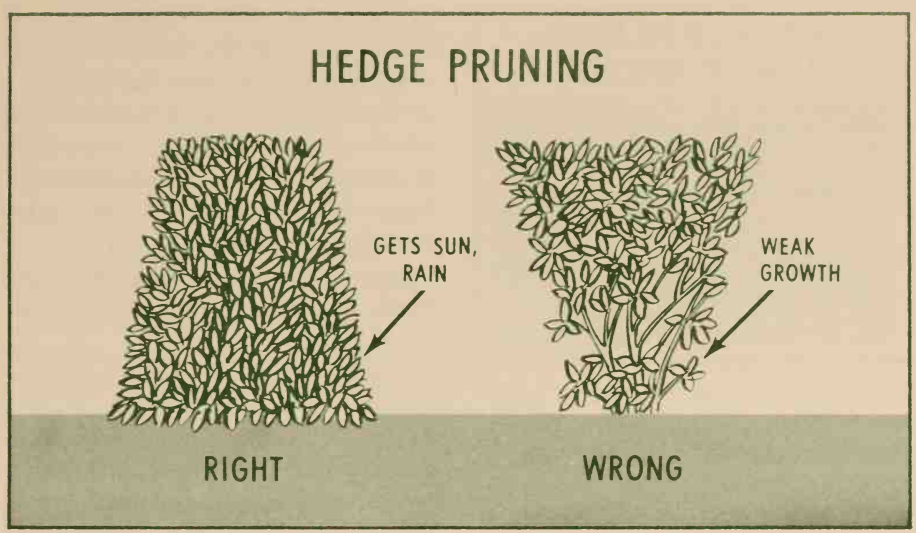
SPREADING



To change the shape of a plant, cut it back to where a branch or twig grows in the direction you want the plant to grow.



You can control the direction of the new growth by cutting back to a side bud that points in the direction you want the branch to grow. New growth will follow the dotted line.



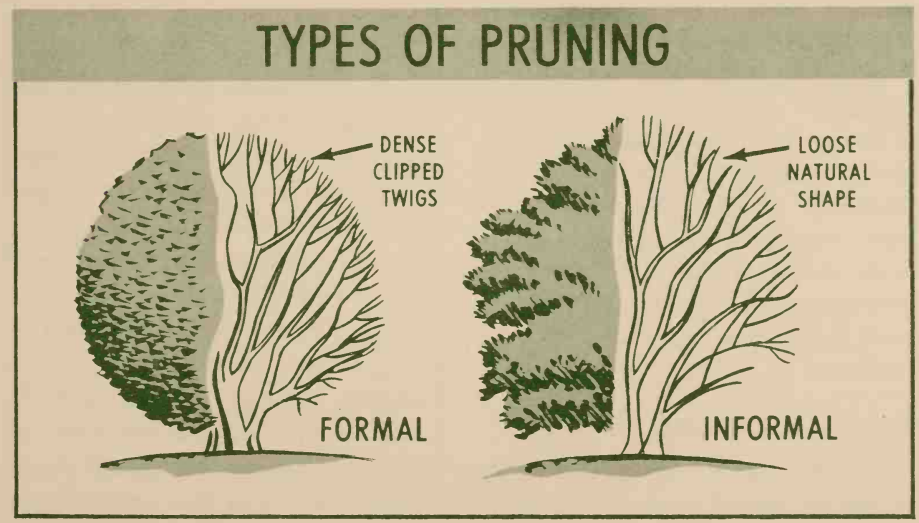
deadwood, cut an inch or two below the deadwood into live wood.

Control the size of your shrubs by thinning out disorderly branches and stems. Cut the branches back to larger branches or to the stems. Thin the stems by cutting them back to the ground.

Thinning allows room for the growth of side branches, which make the plant bushier. When you thin the stems, cut out the older, taller stems first.

Do not try to remove all the old stems in one year. Cut out about one-third of the stems each year for 3 years so you will always have a flower display.

Hedges usually need more pruning than other shrubs to give them the shape you want them to have. Cut hedges back about 6 to 8 inches from the ground. Cut the new shoots back 6 to 8 inches from the old growth. Con-



tinue this until the hedges reach the desired thickness and height. Then as new shoots appear, cut them back to a single bud. Prune your hedges as often as necessary during the growing season.

Branches that are diseased, dead, or damaged should be pruned as the need arises. Most of this pruning can be done, however, in early spring before growth starts.

You can increase the number and size of flowers for the next year by removing seed pods as soon as they form. And if you prune as little as possible, your shrubs will have more flowers. Some pruning is necessary but light pruning usually is best; heavy pruning reduces the number of blooms.

Some deciduous shrubs bloom in spring and others in summer. Spring flowering shrubs bloom until mid-June; summer flowering shrubs bloom from mid-June into fall. They are pruned at different times of the year and are discussed in the following sections.

Spring Flowering Shrubs

The blooms of spring flowering shrubs are formed on growth produced the previous year. If you prune these shrubs in the winter months, you will remove many of the flower buds that would produce blooms the following spring. Spring flowering shrubs should be *pruned as soon as the flowers fade* in the spring before new growth starts. Pruned plants will have larger flowers than unpruned ones.

Some common spring flowering shrubs and their pruning requirements are as follows.

Almond, flowering (*Prunus*).—Prune branches to shape the plant.

Azalea.—Prune branches to promote new growth. Remove sucker shoots from the base of the plant.

Beautybush (*Kolkwitzia*).—Prune old wood as necessary to promote new growth.

Barberry (*Berberis*).—Prune to shape the plant and to remove old branches so new growth can develop.

Blueberry (*Vaccinium*).—Prune small, weak twigs to promote growth of vigorous shoots that will provide more foliage color in the fall.

Broom (*Cytisus*).—Prune to control size.

Burningbush (*Euonymus*).—Prune to control shape and size when used as a hedge. Remove crowded branches of single plants.

Crab apple (*Malus*).—Prune to shape the plant and to remove old wood so new growth can develop.

Currant (*Ribes*).—Remove 3-year-old wood to promote new growth.

Deutzia.—Remove 3-year-old wood to promote new growth.

Dogwood (*Cornus florida* and *C. mas*).—Prune 3-year-old stems of shrubs to promote new growth. Trees may be grown to their natural shape without pruning.

Elder (*Sambucus nigra*).—Prune to shape the plant.

Enkianthus, redvein (*Enkianthus campanulatus*).—Prune to shape the plant. Only slight pruning is needed.

Firethorn (*Pyracantha*). — Prune lightly to control size and shape. Severe pruning reduces the number of berries on the plant.

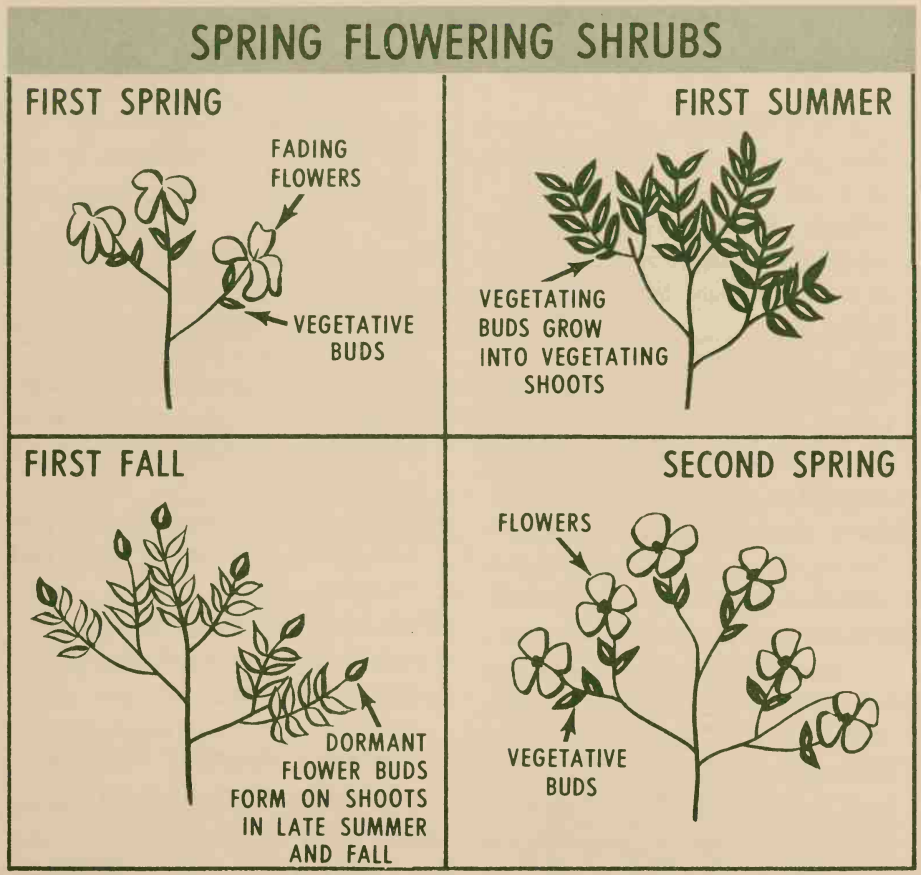
Forsythia.—Cut old stems to the ground as necessary to promote new growth.

Fringetree (*Chionanthus virginicus*).—Prune old stems and branches as necessary to control size.

Garlandflower (*Daphne cneorum*).—Prune to control size and shape. Severe pruning may be needed to keep the plant from becoming ragged.

Heath (*Erica*).—Prune to promote new growth. Severe pruning may be needed.

Honeysuckle (*Lonicera fragrantissima.*)—Prune old stems and branches as necessary to control size and promote new growth.



Prune only before vegetative buds begin to grow. Cutting flowers from plants is a good way to prune. Do not prune in fall or winter because this will remove flower buds that would produce flowers the following spring.

Hydrangea (*Hydrangea macrophylla hortensis*).—Prune after flowering to promote new growth. Winter damage to flower buds may cause plants to produce only foliage and no flowers. When this happens, prune in summer after plants would have flowered; do not prune in winter or early spring.

Kerria.—Prune old wood to promote new growth.

Lilac (*Syringa*).—Remove suckers and old flowers.

Magnolia (*Magnolia stellata*).—Remove seed pods and, when necessary, prune branches to shape the plant.

Mockorange (*Philadelphus*).—Prune 3-year-old wood to promote new growth.

Ninebark (*Physocarpus*).—Prune crowded stems as necessary to thin them and to promote new growth.

Pearlbush (*Exochorda*).—Thin branches to promote new growth and to make the plant bushier and less leggy.

Privet (*Ligustrum*).—Cut 4-year-old wood to the ground to promote new growth. Clip several times in summer to shape the plants when used as a hedge.

Quince, flowering (*Chaenomeles*).—Cut out old wood as necessary to promote new growth.

Rockspray (*Cotoneaster*).—Prune branches to control size and shape.

Rose (*Rosa*).—Prune shrub roses to shape the plant and thin crowded branches; cut stems back to a healthy bud. Cut some of the old stems of rambling and climbing roses back to young shoots every year to thin the plants and promote new growth and larger flowers.

Shadbush (*Amelanchier*).—Prune old stems and branches as necessary to control size.

Snowball (*Styrax*).—Prune to shape the plant and to remove crowded branches. To grow plant as a tree, cut out all stems except one; to grow as a shrub, leave several stems.

Spirea (*Spiraea*).—Some common early flowering types are bridalwreath, garland, reeves, thunberg, and vanhoutte. Remove 3-year-old wood and prune branches to shape the plant.

Sweetshrub (*Calycanthus floridus*).—Prune old stems and branches as necessary to control size.

Tamarisk (*Tamarix parviflora, T. tetrandra,* and *T. juniperina*).—Prune stems and branches to control size and shape. Cut old stems to the ground if they become leggy and tall.

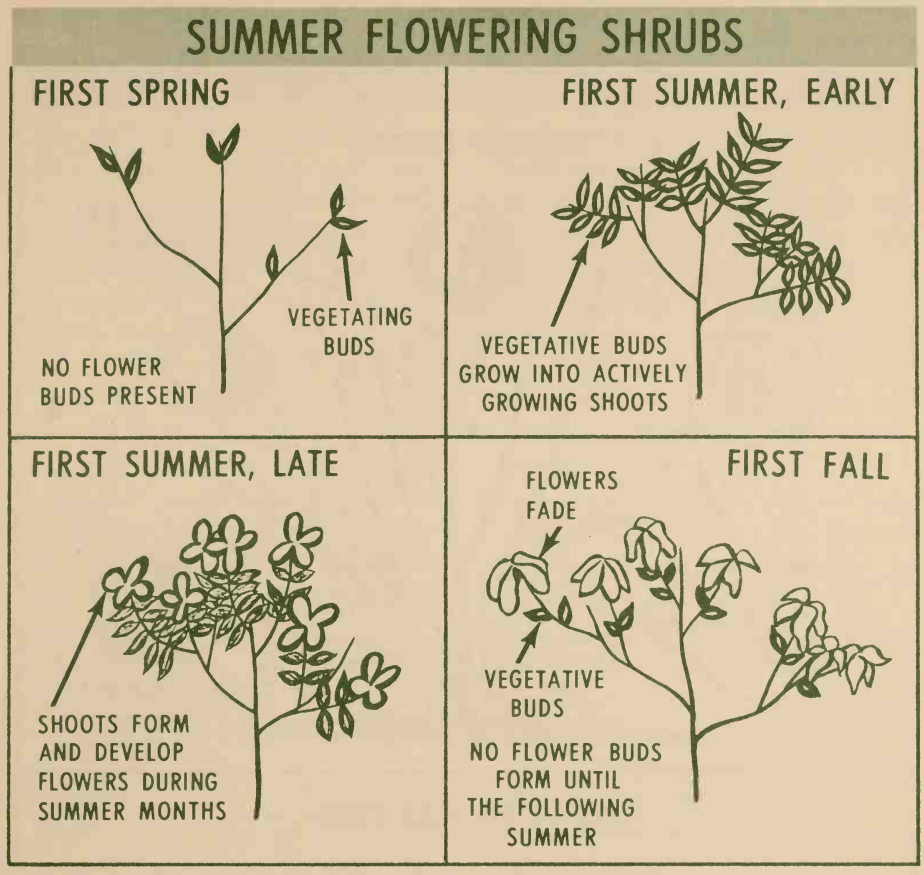
Viburnum. Many kinds of Viburnum are grown for flowers and fruit. Some of the more common kinds are *Viburnum burkwoodi, V. carlesi, V. fragrans, V. opulus, V. macrocephalum, V. sieboldi,* and *V. tomentosum mariesi.* Prune to control shape and height.

Weigela—Prune old branches and thin new growth as necessary to prevent crowding.

Witch hazel (*Hamamelis mollis*).—Cut out old wood to control size and promote new growth.

Summer Flowering Shrubs

The blooms of summer flowering shrubs grow on wood produced the same season. These shrubs should be *pruned in the dormant season,* usually in early spring before growth begins.



Prune in late fall to early spring before growth starts. Pruning after growth starts removes flower buds that would form blooms.

Some common summer flowering shrubs and their pruning requirements are as follows.

Abelia.—Prune to control size and shape, and cut out crowded branches and stems to promote new growth. To keep the plant compact, remove wild shoots when they appear.

Beautyberry (*Callicarpa japonica*).—Cut stems about 12 inches from the ground every year to promote new growth.

Bladder senna (*Colutea*).—Cut stems to the ground every year to promote new growth.

Bluebeard (*Caryopteris*).—Cut stems to the ground every year to promote new growth.

Bushclover (*Lespedeza*).—Prune to shape the plant, and cut top growth to control the height.

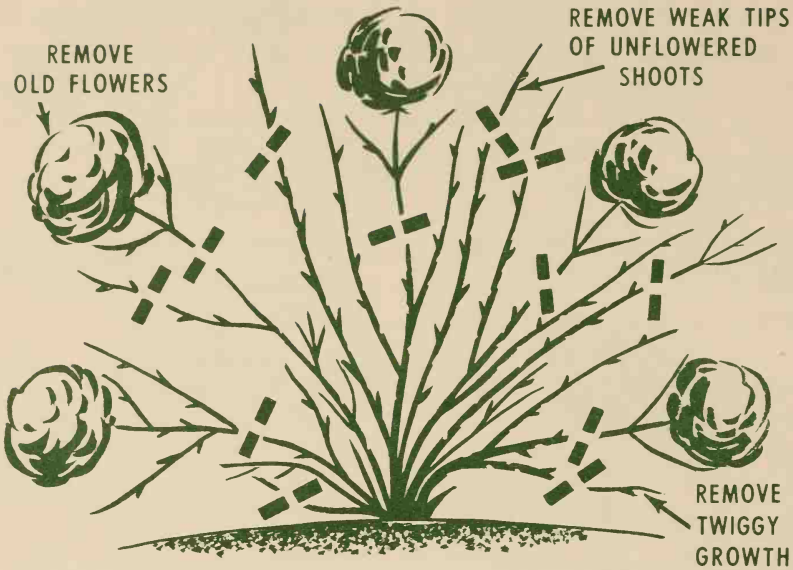
Butterflybush (*Buddleia davidi*).—Cut stems to the ground every year to promote new growth and produce large flower stalks.

Chastetree (*Vitex*).—Cut stems about 6 to 12 inches from the ground to promote new growth.

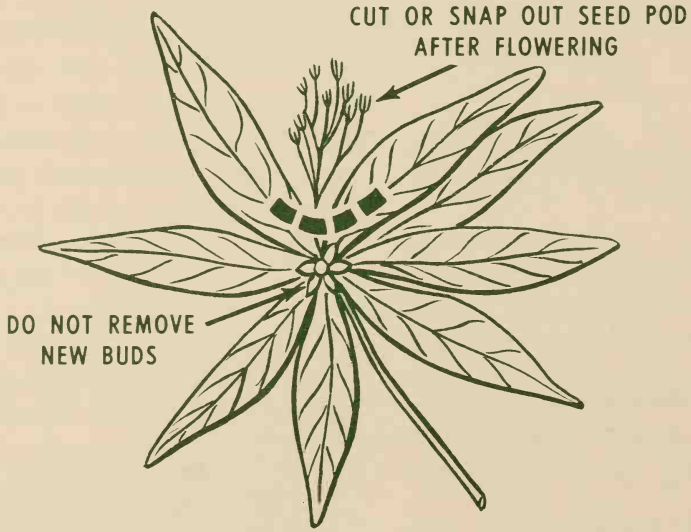
Coralberry (*Symphoricarpos*).—Prune stems back to three or four buds. Cut

SPECIAL PRUNING PROBLEMS

SHAPING PLANTS



REMOVING SEED PODS



out crowded stems and branches as necessary.

Crape myrtle (*Lagerstroemia*).—Prune to control shape and produce flowers. Lack of pruning will cause plant to produce small or no flowers; heavy pruning is needed for vivid flower displays. Plant may be grown as a compact shrub or as a tree.

Elder, red berry (*Sambucus pubens*).—Prune to shape the plant.

Eleagnus.—Every few years, prune to shape the plant and promote new growth.

Heather (*Calluna.*)—Cut stems to the ground to promote new growth and more flowers. Do not prune in summer or winter because plants will die; prune only in early spring before new growth starts.

Hibiscus (*Hibiscus rosa sinensis*).—Prune stems, leaving two buds, to shape the plant and promote flowering.

Honeysuckle, bush (*Diervilla*).—Prune to the ground to control spreading growth and to retain compact appearance.

Hydrangea (*Hydrangea paniculata* and *H. arborescens*).—Prune back to a few buds to promote new growth, and cut out crowded stems as necessary.

Indigobush (*Amorpha*).—Prune out old wood as necessary to promote new growth.

Jersey tea (*Ceanothus*).—Cut stems about 6 inches from the ground every year to promote new growth.

Magnolia (*Magnolia virginiana*).—Cut back tips of new shoots when necessary to shape the plant. Do not prune branches except when a badly shaped plant must be reshaped.

Mintshrub (*Elsholtzia*).—Cut stems to the ground every year to promote new growth.

Raspberry, flowering (*Rubus*).—Cut back stems after flowering to promote new growth.

Rose (*Rosa*).—Prune all types of roses in summer when the flowers fade. Follow the instructions given for pruning spring flowering roses.

St. Johnswort (*Hypericum*).—Cut out crowded branches, and cut other branches back, leaving about two buds on each branch to promote new growth.

Snowberry (*Symphoricarpos*).—Prune stems back to a few buds. Cut out crowded stems and branches as necessary.

Spirea, false (*Sorbaria*).—Prune heavily every 3 or 4 years to control rapid growth; remove seed pods each year.

Spirea (*Spiraea*).—Some common summer flowering types are Anthony Waterer, bumalda, Japanese, and billiard. Cut out crowded stems as necessary, and cut other stems back to a few buds. Remove seed pods when they form.

Stephanandra.—Prune out small, cold-damaged twigs.

Sumac (*Rhus*).—The common types are staghorn and smooth sumac. Prune the stems to the ground to promote new growth. Sumac can be trained to grow as a tree when only one stem is allowed to grow.

Summersweet (*Clethra*).—Prune to control shape and spreading growth.

Tamarisk (*Tamarix hispida, T. pentandra,* and *T. odessana*).—Remove seed pods when they form. If plants become ragged and unattractive, cut them back to the ground to promote new growth.

EVERGREEN SHRUBS

Evergreen shrubs are plants that have leaves on them throughout the year. They do not shed all their leaves at one time and their branches are not bare in winter.

Evergreens should be pruned to control their shape and size, to remove dead, diseased, or damaged wood, and to remove old branches to allow for new growth. Usually evergreens need less pruning than deciduous shrubs.

Some evergreens are broad leaved and some are coniferous, or narrow leaved. The pruning requirements of the two types are different.

Broad-Leaved Evergreens

Broad-leaved evergreens that go into the dormant period with their *swelled flower buds already formed should be pruned immediately after flowering.* Those that produce their *flowers on new wood may be pruned anytime during the dormant period, or if they bear fruit, after the fruit ripens.*

When you use broad-leaved evergreens as formal hedges, trim them as often as necessary to shape them.

When you prune branches to promote new growth or to shape the plant, cut back to a bud or green shoot. Unless you leave a bud or shoot, new growth will not appear.

If a plant has several stems, cut the old, leggy stems to the ground to promote new growth from the base of the plant. Do not cut back all the old stems in one year. Cut some of them each year for 2 or 3 years.

Remove flowers when they fade. Cut out dead or diseased wood anytime. When you remove dead or diseased wood, cut back an inch or two into live wood or to a bud.

Some common broad-leaved evergreens and their pruning requirements are as follows.

Andromeda (*Pieris japonica*).—Prune to shape the plant and promote new growth.

Aucuba (*Aucuba japonica*).—Prune to promote compact growth and to remove winter-damaged wood.

Azalea.—Prune branches after flowering to promote new growth, and cut back leggy stems.

Blueberry, box (*Vaccinium.*)—Prune to promote new growth.

Box (*Buxus*).—Cut branches and stems to keep the plant compact.

Camellia (*Camellia japonica* and *C. sasanqua*).—Cut out old wood to promote new growth and improve flowering.

Cherry laurel (*Prunus*).—Cut back old stems and branches to control size and shape.

Holly (*Ilex*).—Prune to control size and shape.

Hollygrape (*Mahonia*).—Cut back the stems to keep them from becoming leggy.

Holly osmanthus (*Osmanthus*).—Prune to shape the plant.

Inkberry (*Ilex*).—Prune to control size and shape.

Leucothoe (*Leucothoe catesbaei*).—Cut out old stems when they become crowded.

Mountain laurel (*Kalmia*).—When plants get too large, cut some of the old stems to the ground to promote new growth.

Nandina (*Nandina domestica*).—Prune out old stems to promote new growth.

Oleander (*Nerium oleander*).—Prune top and branches to control size.

Privet (*Ligustrum*).—Japanese and glossy privets are evergreen. Prune to control size and shape.

Rhododendron.—Prune branches after flowering to promote new growth. Cut leggy stems in early spring.

Skimmia (*Skimmia japonica*).—Prune to shape the plant.

Coniferous Evergreens

Many coniferous evergreens can become large trees. If you want to slow their growth, prune the roots in early spring before growth starts. Cut the ends of the roots by digging around the plant about one-third of the way in from the tips of the branches. The plants that may need root pruning are fir, spruce, red cedar, pine, and juniper.

It is best to prune coniferous evergreens in May or June when the buds and shoots are newly formed. If the plants are pruned every year, pruning usually can be limited to cutting back part or all of the new growth. When branches need more severe pruning, cut them back to a growing shoot shortly before or just as growth starts in the spring. Trim formal hedges as often as necessary to shape them and to thin out the shoots.

You can remove the top leaders of coniferous evergreens to keep the plants shorter and more dense. If you leave the top leader, the plant will grow taller and more open. If two leaders develop, cut out the weaker one.

Some common coniferous evergreens and their pruning requirements are as follows.

Arborvitae (*Thuja*).—Prune both American and oriental arborvitae before growth starts in early spring and again in June. Clip ragged branches in early spring to shape the plant; prune new growth in June to control size and shape.

False cypress (*Chamaecyparis*).—Prune new growth to control size and shape.

Fir (*Abies*).—Cut back new shoots (candles) about half way to promote new side growth.

Hemlock (*Tsuga*).—Prune new growth to control size and shape.

Juniper (*Juniperus*).—Prune ragged branches in early spring and clip new growth in June to control size and shape. You may need to cut out some branches completely if they become overcrowded.

Pine (*Pinus*).—Cut back candles about halfway to promote new side growth.

Red cedar (*Juniperus*).—Prune ragged branches in early spring and clip new growth in June to control size and shape.

Spruce (*Picea*).—Cut back candles about halfway to promote new side growth.

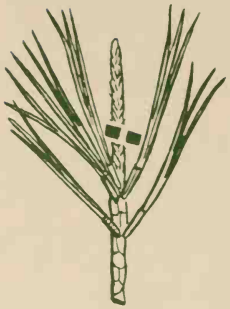
Yew (*Texus*).—Prune ragged branches in early spring and clip new growth in June to control size and shape.

VINES

Vines usually need pruning to limit growth, to thin the stems and branches, and to remove dead wood. Some vines grow so thick and fast that considerable pruning is necessary. Others need little pruning.

Prune spring flowering clematis after flowering. Prune all other vines in the dormant season. Thin crowded stems by cutting them to the ground. To limit growth, cut tops and branches back as

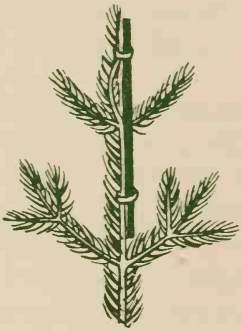
SHAPING CONIFERS



Prune pines in late spring by removing one-half of the candle, or new shoot. Do not damage needle tips because the tips of cut needles tend to turn brown.

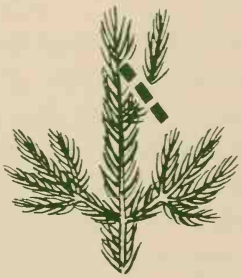
You can reduce open spaces on spruces by cutting off one-half of the leader, or terminal shoot, in the spring when the new needles are about half developed.

Keep side branches from growing out of bounds by removing the terminal bud. This not only slows outward growth but also helps to make the plants more bushy.



You can replace a lost leader by tying one of the branches in the top whorl to a vertical brace.

Trees that have already grown too wide can be narrowed by cutting the branches back to an inner bud.



If the tree develops two leaders, remove the less desirable one in early spring. Trees with more than one leader are weaker and less attractive than trees that have a single, strong, central leader.

far as necessary. Cut dead or diseased branches back to healthy wood.

Some common vines and their pruning requirements are as follows.

Bittersweet (*Celastrus*).—Prune stems each year, leaving three or four buds, to promote new growth. Cut back the top to make the plant branch.

Clematis.—Thin stems and branches to promote new growth. Use care when pruning because the stems are very brittle and easily damaged.

Dutchman's pipe (*Aristolochia*).—Cut back the top to control size and make the plant branch. Thin the stems to promote new growth.

Honeysuckle (*Lonicera*).—Thin stems and branches to promote new growth.

Silverfleece vine (*Polygonum*).—Cut stems back to the ground each year to promote all new growth.

Trumpet creeper (*Campsis*).—Prune stems each year, leaving three or four buds, to promote new growth. Cut back the top to make the plant branch.

Wintercreeper (*Euonymus*).—When used as ground cover, prune the top growth to keep it close to the ground. When used as a wall cover, clip branches to control spreading.

Winter jasmine (*Jasminum*).—Thin stems and branches to promote new growth.

Wisteria.—Prune back to three or four buds each year to promote new growth and to produce flowers. Cut back the top to make the plant branch.

Woodbine (*Parthenocissus*).—Prune branches to control spreading.

PRUNING TOOLS

The basic tools for pruning are hand shears, pruning saw, and lopping shears.

Hand shears are used to cut twigs, small branches, and vines. When you use this tool, cut straight through the wood. If you twist the blade as you cut, the wound will be ragged and take longer to heal.

A pruning saw is used to cut branches and stems that are too large for shears. A saw with a narrow, curved blade and coarse teeth set wide is best for pruning shrubs that have branches growing close together.

Lopping shears have long handles and are used to prune larger and tougher branches than hand shears will cut. Also, the long handles are useful to reach high branches and to reach through branches with spiny leaves. As with hand shears, do not twist the blade when you cut.

You may need to rent special pruning tools for difficult pruning jobs.

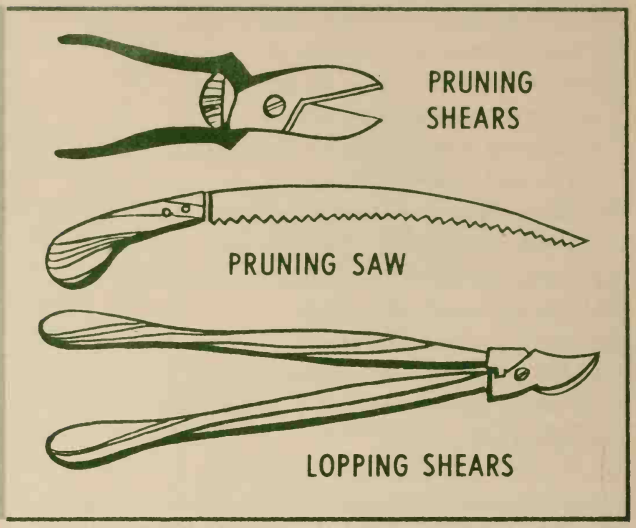
Keep your pruning tools sharp so they will make smooth, clean cuts. To help prevent disease and decay, disinfect all tools with denatured alcohol after pruning diseased parts of plants.

TREATING WOUNDS

Small pruning cuts of less than 1 inch in diameter usually heal quickly if they are smooth and at an angle so water does not stand in them. But you should treat wounds over 1 inch in diameter to prevent decay, disease, and penetration by insects while the wound is healing.

PRUNING EQUIPMENT

These are essential pruning tools. They should be kept sharp, or they will make a ragged, slow-healing cut.



The best wound dressing is asphalt varnish containing an antispetic. An antiseptic prevents the spread of harmful organisms that may contaminate the treating material. Asphalt varnish containing an antiseptic is available at most garden supply stores.

If you cannot get a dressing containing antiseptic, use ordinary asphalt varnish. Before applying plain asphalt varnish, swab the wound with alcohol or coat it with shellac.

Apply the dressing as soon as the wound is dry. Asphalt varnish will not stick if the wound is wet.

One coat of dressing will last 2 to 3 years. This usually is long enough for the wound to heal. Inspect wounds periodically and apply additional dressing if the coating is cracked or peeling.

Coniferous evergreens usually seal small wounds with natural resin. If no resin forms, treat the wounds with asphalt dressing.

Prepared by

Crops Research Division

Agricultural Research Service

Washington, D.C. **Issued March 1969**

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price 10 cents

U.S. GOVERNMENT PRINTING OFFICE: 1968 O—332–163